

BIGTOOLRACK®

Extreme Granite Grapple For Compact Tractors



By Top Dog Attachments

Introduction

Thank you for purchasing your new Bigtoolrack Extreme Granite Grapple. We hope that you enjoy your new attachment for many years to come, and that it will be more than useful to you when on the job. At Bigtoolrack we specialize in designing and manufacturing the highest of quality skid steer and tractor attachments on the market. Every attachment goes through inspection before leaving our facility to make sure that they meet our high standards. Designing is a major key to manufacturing our high quality products, and that is why we spend a great amount of time perfecting our designs. We use heavy duty A50 steel to help ensure that our products will withstand a heavy workload. BTR Attachments are made in the USA right in Detroit Lakes, Minnesota.

General Description

The Bigtoolrack Extreme Granite Grapple is a heavy duty brush grapple that is designed to be compatible with tractors ranging from 19hp to 55hp depending on the grapple size. This grapples versatile design is able to make clearing brush, logs, roots, and much more, an easy and quick process. During the designing and testing process we spent many hours to ensure that this product is durable enough and easily functionable for the user. Each tooth on the bottom is reinforced to eliminate the bar going across, this allows dirt to pass through rather than build up in the teeth. This feature also makes digging out small roots much easier due to how durable the teeth are. Also, with this low profile grapple, maneuvering through wooded areas and tight spaces is much easier.

Table of Contents

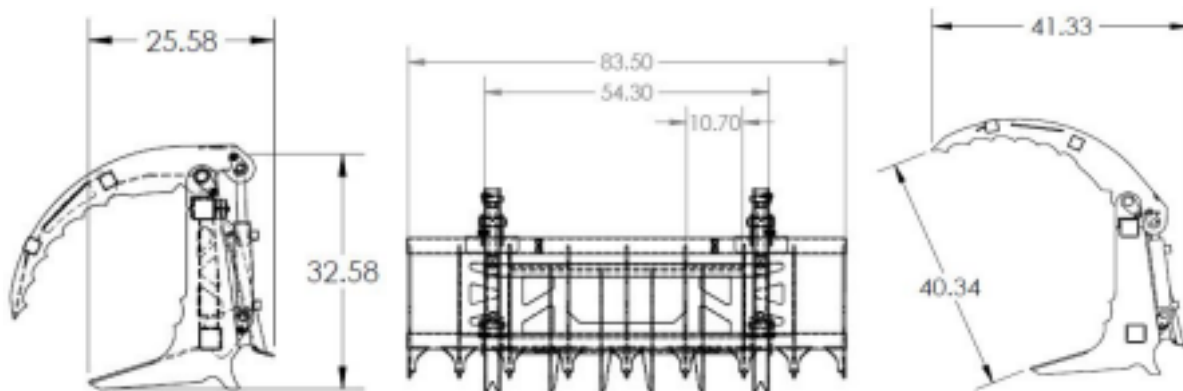
1. Specifications 4-7
2. Hydraulic Hose Routes 7-8
3. Safety and Warnings 9

SPECIFICATIONS:

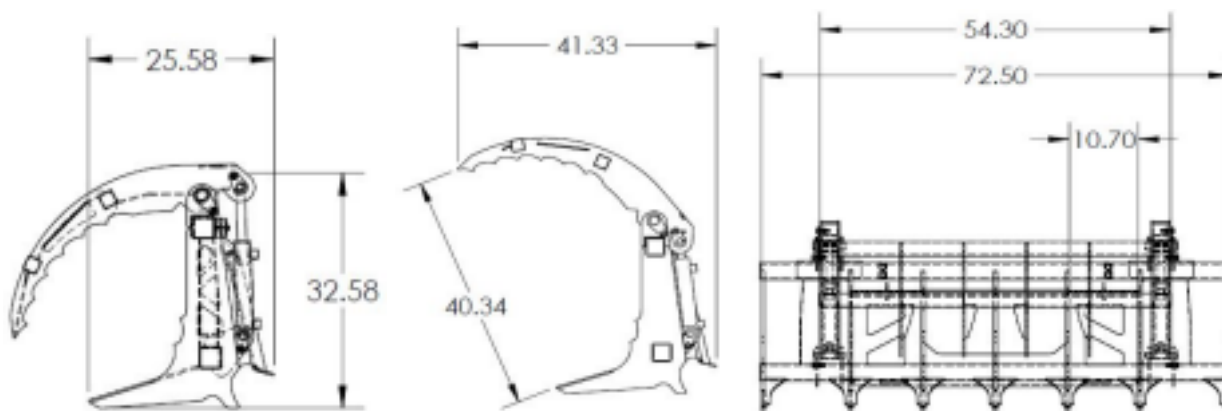
Bigtoolrack Extreme Granite Grapple

Size	54"	60"	72"	84"
Length	55"	60 ½"	72 ½"	83 ½"
Width	25"	25 ½"	25 ½"	25 ½"
Height	35 ¾"	35 ¾"	35 ¾"	35 ¾"
Weight	235 lbs	390 lbs	540 lbs	625 lbs
Max Opening	40 ½"	40 ¼"	40 ¼"	40 ¼"
HP Rating	19-24	24-37	37-55	75

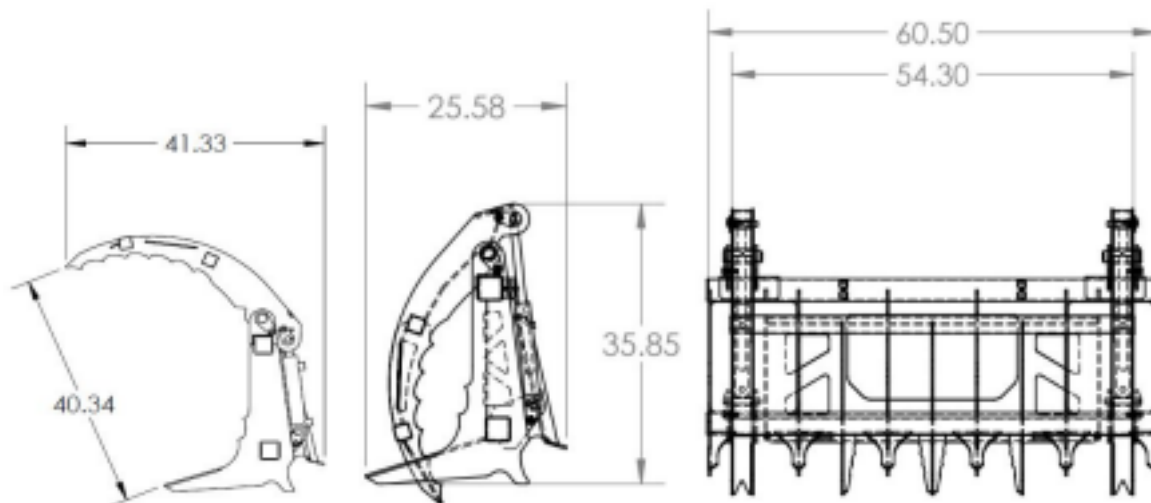
84" Grapple Dimensions



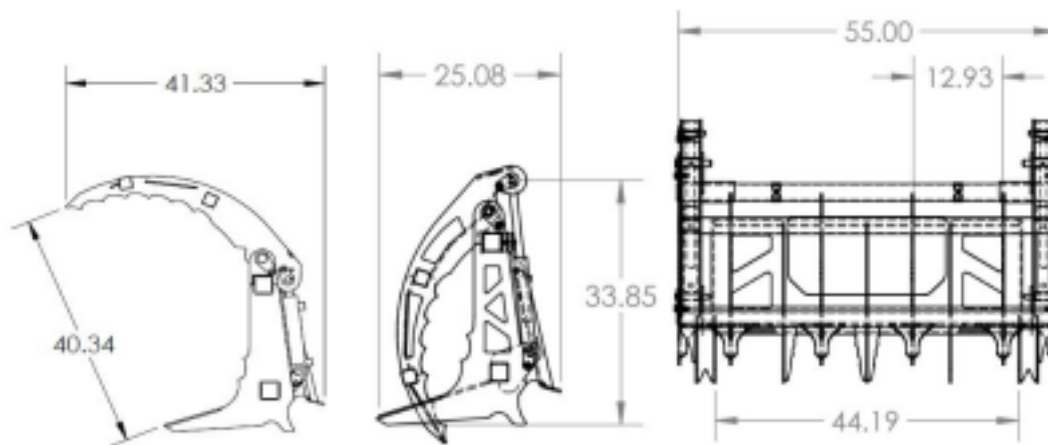
72" Grapple Dimensions



60" Grapple Dimensions



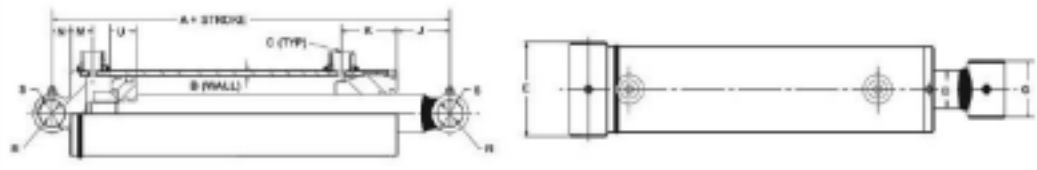
54" Grapple Dimensions



Hydraulic Ram Specifications

Bore	Stroke	Retracted	Extended	PSI
1 ½"	8"	16"	24"	3000
2"	8"	16"	24"	3000

Bore	Stroke	Rad Dia.	Retracted	Extended	Column Load	Part Size	Fix Dia.
2	8	1.25	16	24	9420	SAE 6	1



Dimensional Data in Inches (Millimeters)

BORE	DIMENSIONS												
	A	B	C	D	E	G	J	K	M	N	R	S	U
1.500 (38.1)	8.000 (203.2)	0.188 (4.8)	SAE 4	1.000 (25.4)	2.250 (57.2)	2.000 (50.8)	2.913 (73.99)	2.129 (54.1)	0.929 (23.6)	0.625 (15.9)	0.764 (19.4)	1.250 (31.8)	0.945 (24)
2.000 (51)	8.000 (203.2)	0.188 (4.8)	SAE 6	1.250 (31.8)	2.750 (69.05)	2.250 (57.15)	2.844 (72.24)	1.937 (49.2)	0.894 (22.7)	0.750 (19.1)	1.015 (25.8)	1.500 (38.1)	1.000 (25.4)
2.500 (64)	8.000 (203.2)	0.188 (4.8)	SAE 8	1.500 (38.1)	3.250 (82.55)	2.250 (57.15)	2.854 (67.41)	1.925 (48.9)	0.894 (22.7)	0.750 (19.1)	1.015 (25.8)	1.500 (38.1)	1.000 (25.4)
3.000 (76)	8.000 (203.2)	0.197 (5.0)	SAE 8	1.500 (38.1)	3.750 (95.25)	2.250 (57.15)	2.301 (58.45)	2.244 (57)	1.012 (25.7)	0.750 (19.1)	1.015 (25.8)	1.500 (38.1)	1.000 (25.4)
3.500 (89)	10.000 (254)	0.219 (5.563)	SAE 8	1.750 (44.5)	4.250 (107.95)	2.250 (57.15)	3.98 (101.09)	2.248 (57.1)	1.012 (25.7)	1.000 (25.4)	1.265 (32.1)	2.000 (50.8)	1.000 (25.4)
4.000 (102)	10.000 (254)	0.250 (6.350)	SAE 8	2.000 (50.8)	4.750 (120.65)	2.500 (63.5)	3.934 (99.92)	2.244 (57)	1.012 (25.7)	1.126 (28.6)	1.515 (38.5)	2.252 (57.2)	1.000 (25.4)
5.000 (102)	11.000 (279.4)	0.250 (6.350)	3/4 NPT	2.500 (63.5)	5.750 (147.15)	4.000 (101.6)	2.750 (69.9)	2.272 (57.7)	1.500 (38.1)	0.787 (19.99)	1.515 (38.5)	2.500 (63.5)	1.626 (41.3)

QC-AG POPPET TYPE HYDRAULIC QUICK COUPLING (STEEL)



Socket with valve Plug with valve



Features

QC-AG Series couplings feature:

- Poppet valves to prevent uncoupled leakage
- Critical parts are hardened for durability
- Dependable ball-locking mechanism holds the mating halves together
- Socket and plug are precision machined from solid bar stock
- QC-AG Series conforms to the ISO 5675 Standard
- Interchangeable with PARKER 4000 Series, STUCCHI IR-V Series, Safeway 520 Series, and others

See interchange chart on page 28

Applications

The QC-AG series couplings bring to the industry a proven design for use on construction equipment, forestry equipment, agricultural machinery, oil tools, steel mill machinery and other demanding hydraulic applications.

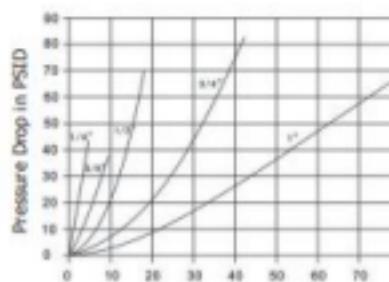
Specifications

Body Size (in)	1/4"	3/8"	1/2"	3/4"	1"
Rated Pressure (PSI)	5000	4000	4000	3000	3000
Rated Flow (GPM)	3	6	12	28	50
Temperature Range (std seals)	-22°F to +230°F				
Standard seal material is	BUNA				
Safety Factor	4:1				

Performance

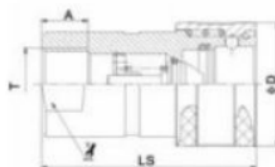
QC-AG Series (1/4", 3/8", 1/2", 3/4", 1")

Test Fluid: Oil-200SUS



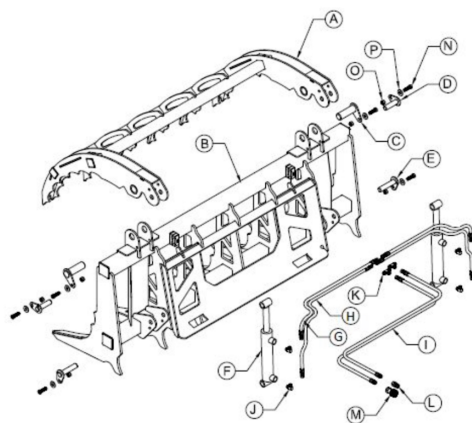
Flow in GPM
1 GPM = 3.78 L/Min
1PSID = 0.0069 Mpa

Socket



Parts and Hose Routes:

ID	DESCRIPTION	QTY.
A	GRAPPLE TOP	1
B	GRAPPLE BOTTOM	1
C	PIVOT PIN	2
D	TOP CYLINDER PIN	2
E	BOTTOM CYLINDER PIN	2
F	2" X 8" CROSS TUBE CYLINDER	2
G	24" HOSE WITH SLEEVE	1
H	38" HOSE WITH SLEEVE	3
I	92" HOSE WITH SLEEVE	2
J	90 DEG. CYLINDER ELBOW	4
K	GRAPPLE "T"	2
L	QUICK DISCONNECT - MALE	1
M	QUICK DISCONNECT - FEMALE	1
N	1/2"-13 x 1 1/2" GRB BOLT	6
O	1/2"-13 HEX LOCK NUT	6
P	1/2" FLAT WASHER	6
	COMPLETE HOSE KIT	1



Safety and Warnings:

Getting Started:

1. Attach grapple to tractor and secure properly.
2. Clean off quick connects going to and from tractor/grapple.
3. Attach quick connect couplers together, (wipe clean before connecting)
4. Test grapple arms by slowly extending and retracting hydraulic rams.
5. Be sure to not operate within 10 feet of another person.

Warnings:

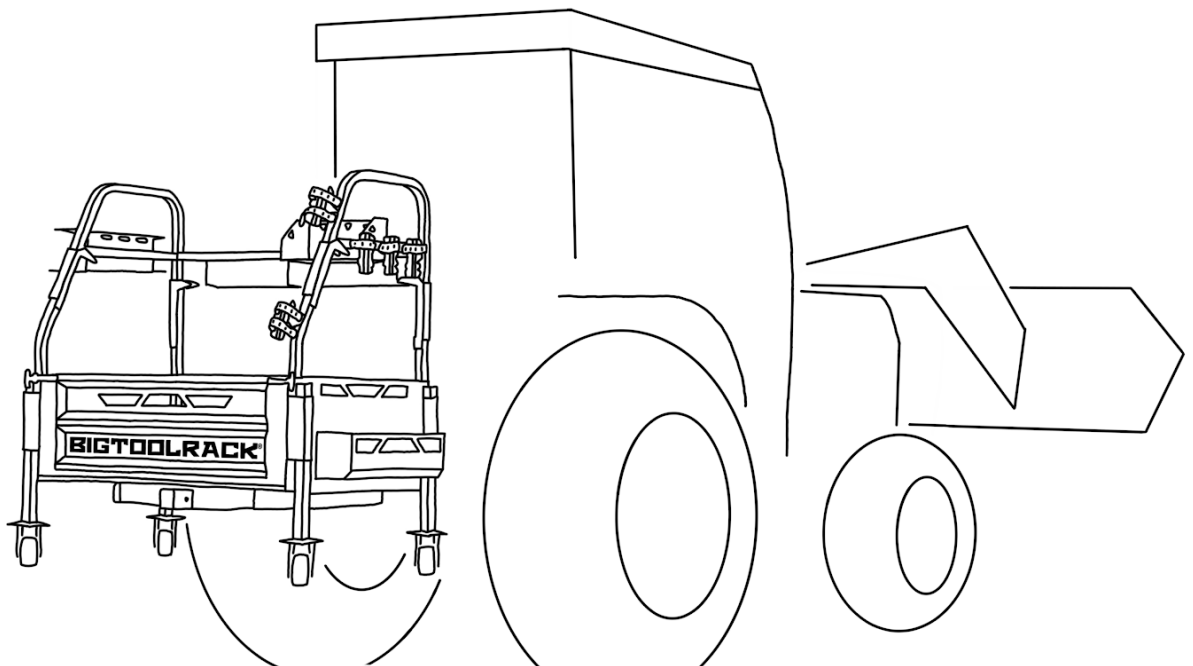
1. Never hit or pound couplers.
2. Always relieve pressure before disconnecting hoses.
3. Only use grapple for what it is designed for.
4. NEVER allow someone to sit on, or ride grapple while driving or using.
5. Keep hands and body parts clear of pinch points at all times.

Warranty:

Top Dog Attachments, warrants products purchased from Top Dog to the Original Retail Purchaser to be free from defects in material and workmanship for a period of twelve (12) months from the warranty start date.

Warranty Does Not Include:

1. Transportation to selling dealer's business location or, at the option of the original retail purchaser, the cost of a service call
2. Used equipment
3. Normal maintenance service and wear items
4. Repairs or adjustments caused by improper use; failure to follow recommended maintenance procedures, accidents or other casualty
5. Liability of incidental or consequential damages of any type, including but not limited to lost profits or expenses of acquiring replacement equipment.



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Built to Haul it All™